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## The Future of ADASS

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**Abstract.** ADASS has been a successful conference series for 24 years. If it is to continue to be successful and relevant we need to ensure that it provides what we as a community need from an annual conference. Earlier this year the ADASS Program Organising Committee conducted a survey on the content, style and governance of ADASS, in order to ascertain the conference needs of our community of astronomy software, methods and algorithms providers and users. 140 people participated in the survey: familiar faces, newcomers and a significant number of people who have yet to attend an ADASS.

We summarise the Birds of a Feather session held on 7 October 2014, which discussed the findings of the survey and the shape that the community would like future ADASS meetings to take: What do we like of the current format? What would we change? What can we do to make ADASS fit our current and future needs? If we are to ensure that ADASS is vibrant, interesting and at the cutting edge of our subject we need to take collective responsibility for shaping its future.

### 1. Introduction

ADASS is the major annual conference for those interested in astronomy software and systems, from architects and developers to users and managers. Its 24 year history indicates its usefulness to individuals and institutions, as a place to showcase our latest work, to learn new techniques and discover which have been successfully used in our specialist field; to discuss emerging technologies with colleagues with similar interests and generally to work towards continually improving the overall shape of the field of astronomical software.

Success is no reason for complacency, however. Over the last two decades we have seen the needs of our community change, and indeed our demographic has itself changed. On the broader astronomical stage we're seeing our travel budgets shrinking, and many find themselves in the uncomfortable position of having to decide whether their single overseas conference for the year will focus on their science or on the technology aspects of their work. If it is to continue being a useful and worthwhile conference, ADASS must adapt, keeping up with the needs of the ADASS community and the astronomical community as a whole, while keeping in mind our changing demographics.

To this end the ADASS Program Organising Committee (POC) ran a survey in early 2014 to ascertain the needs of the community and the direction and shape which future ADASS meetings should take. 140 people participated (as a comparison, a typi-

cal ADASS has around 270 attendees), 84% of whom had attended 2 or more ADASS conferences, 12% had attended 1 and 14% had never been to an ADASS.

## 2. Results of the 2014 Survey and the BoF Discussion

**Identity** We advertise the ADASS conference as “*a forum for **scientists, developers and programmers** working in areas related to algorithms, software and systems for the acquisition, reduction, analysis, and dissemination of astronomical data*”. The 140 survey participants identified themselves as astronomers (69%), software engineers (38%), programmers (30%), software architects (29%), managers (28%) and computer scientists (22%), with a small number of instrument scientists, and database, archive and data specialists<sup>1</sup>. The fact that 31% of people did not self-identify as astronomers shows that we have moved from a community of “astronomers who code”, to a more diverse one which includes people whose primary expertise is in engineering. This reflects the trend we see in our institutes and telescope facilities, and it is important that the focus and program of the ADASS conference also evolves over time to keep up with the changing needs of our community. The very small numbers of postdocs (6) and students (4) who participated in the survey is compatible with the small number from these two groups who attend the conference. This was discussed in the BoF and it was agreed that mechanisms should be put in place to encourage more students and early career postdocs to come to ADASS.

**Themes** Each year’s conference is based around a handful of key themes. These are chosen by the POC and are intended to reflect the current work, trends and needs of our community, including suggestions made by the conference attendees<sup>2</sup>. The BoF participants agreed that final responsibility for theme selection should rest with the POC, and also that the community should be actively encouraged to nominate key themes. The Appgree mobile application<sup>3</sup>, which was tested during this conference, was put forward as a possible way of facilitating participation and of canvassing community preferences on the submitted topics. For ADASS XXV the POC plans to use Appgree to receive theme suggestions and hopes to see wide participation from the community. Additionally, 88 people submitted key topic suggestions through the survey, and these will also inform the selection of key themes for the next several conferences.

**Conference Content** Both the survey and the BoF discussion agreed that there is a need for greater focus on algorithms, statistics, analysis methods, data science, etc., in invited and contributed talks, and less emphasis on update reports. ADASS talks should be more about the algorithms and techniques than about the projects themselves. There was considerable support from the BoF session for invited review talks looking at the state of play in various aspects of software.

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<sup>1</sup>Participants were able to choose multiple categories, hence the sum of all the categories is greater than 100%.

<sup>2</sup>A list of the themes chosen for the last several conferences can be found at <http://adass.org/docs/ADASSThemeHistory.pdf>

<sup>3</sup><http://www.appgree.com>

There were several practical suggestions made during the BoF which had the support of the room: Authors should be able to classify their paper under more than one key theme when submitting an abstract. This would help the LOC when setting up the conference sessions and ensure that each talk was presented in the most relevant session from the author's point of view. There was also a request to allow authors to supply, when submitting an abstract, an optional link containing more information about the proposed paper.

Discussion on student attendance saw strong agreement on ensuring that the conference fee has a student rate, and allowing authors to indicate whether they are a student both on registration and abstract submission. There was also a general feeling that there should be a way to reserve contributed talk slots for early career attendees (particularly those who have not previously presented a talk), but the details of how this might be achieved were not discussed.

Another subject raised was whether some plenary discussion time could be scheduled during the oral sessions, at the end of each major topic, at the end of each day, or at the end of the conference. There was some support for this and also some concern, from participants who thought it would cut into the time available and result in fewer talks.

A few people showed interested in a hack day, and there was no opposition to the idea. This could be scheduled as a half-day at the end of the conference, or be run concurrently with the tutorial.

**Posters** ADASS has a strong tradition of lively and effective poster sessions. The posters are displayed in a prominent position (close to where coffee is served) and a good amount of time is allocated to allow people to view the posters and for meaningful discussions to occur. Both the survey results and the BoF discussion expressed support for maintaining the poster sessions as they are.

A popular suggestion raised at the BoF was to declare two time slots (one for even-numbered and another for odd-numbered posters) when people were expected to be in attendance at their posters, to facilitate discussion.

**Birds of a Feather** BoF sessions at ADASS are an opportunity for informal, free-flowing discussions among people with a common interest. BoFs are scheduled based on proposals submitted by attendees wishing to organise and chair a session on a given subject. An average of 5 BoFs are held each year although the number proposed and held in any one year varies widely. Some subjects (e.g. FITS and other data formats) have a BoF most years whilst other topics come up once or twice when they are of interest to the community and then fade away as their relevance and urgency decreases.

At the XXIII-rd meeting in 2013 informal "pop-up" BoFs were suggested and tried, where the subjects for discussion were proposed and scheduled during the conference, in the style of an "unconference". This was repeated at this year's meeting, and although the take-up of pop-up BoFs has been small the opinion at the BoF was that we should continue to offer them.

A suggestion was made to dedicate a session to people's specific technical problems - "I've got a problem, does anyone know the answer?", harnessing the concentrated expertise of the conference attendees. It was agreed that pop-up BoFs may be useful here, or a hack-day, depending on the nature of the problem.

**Governance** The ADASS Program Organising Committee (POC) consists of around 15 people, these being representatives of the ADASS sponsoring institutions and members of the community with an interest in ADASS. Members are nominated to the POC and ratified by the sitting committee. The 2014 POC consists of 16 people<sup>4</sup>, and includes an executive committee comprised of the POC Chair, Vice-chair, Secretary and Treasurer.

The survey indicated that the majority of the ADASS community are satisfied with the conference organisation and governance (67%) with smaller fractions preferring the POC to be directly elected from and by the community (18%), or wanting to change the length of the term of POC membership (17%).

It was noted at the BoF session that the POC is gender-unbalanced at present, and has been so for all of ADASS's history. Additionally the wish was expressed for the composition of the POC to be more geographically diverse.

**Costs and Sponsorship** There was agreement at the BoF that we should seek industry support for the conference. This was mainly seen as a way to reduce costs, and particularly to make it easier for students to attend. The practicalities are open to debate, but nobody saw it as bad, as long as our independence is preserved.

Once specific idea which saw considerable support was to secure sponsorship from a printer company in the form of a printer loan for a few days at the start of the meeting. The posters could then be printed at the conference location, avoiding the too-common event of posters getting lost or damaged in transit.

The conference fee was discussed, but there was no obvious consensus on whether lowering the fees would make a difference to people's ability to attend the meeting, as this is often a fraction of the travel and accommodation cost. The comment was made that it is hard for young people to obtain travel funding to come to ADASS, although it was agreed that it is important that they do. Student conference rates help slightly as does the Financial Aid scheme.

Finally, the demonstration fees were deemed to be too high by some survey respondents, who argued that demo booths are no longer the technological burden on the LOC that they once were, and that several of the institutes who wish to have a booth at ADASS are the same ones who sponsor the conference. After discussion the POC agreed to reduce the fee for demonstrations from research institutions, but maintain the current fee for commercial bodies.

### 3. Where do we go from here?

The discussion must continue. Please make your ideas and suggestions known. Speak with a member of the POC, or send your thoughts by email ([poc@adass.org](mailto:poc@adass.org)). Alternatively tweet your suggestions to (@astroADASS) or use Appgree to participate in ADASS polls.

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<sup>4</sup>The current POC membership can be found at <http://adass.org/POC.html>